

METHODS AND APPARATUS FOR ALLOCATING RESOURCES
IN A COMMUNICATIONS SYSTEM

5 ABSTRACT OF THE DISCLOSURE

The invention provides a system including methods and apparatus that adjust usage of one or more resources of a data communications channel. The system can negotiate a current resource setting for usage of the resource of the communications channel and can perform communications on the communications channel using the resource. The resource can be, for example, a bandwidth setting of the communications channel. Periodically, the system can renegotiate a new value for the current resource setting upon detecting a negotiation event during performance of communications on the communications channel using the resource. One such negotiation event is an indication that an accrued usage cost of the resource of the communications channel substantially equals or exceeds a cost to renegotiate the current resource setting. Another negotiation event indicates that an actual resource setting of the communications channel substantially equals or exceeds the current resource setting for the communications channel. Another negotiation event indicates that a data communications device using the bandwidth setting of the communications channel has requested to negotiate a new value for the current resource setting of the communications channel.